

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Kamen	Atty Docket:	3061/101
Serial No.:	10/751,166	Art Unit:	3711
Date Filed:	January 3, 2004	Examiner:	Aryanpour
Invention:	<b>Method for Creating Coopertition</b>	Date:	March 7, 2008

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/Bruce D. Sunstein, #27,234/  
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**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Dear Sir:

Applicant submits the present Pre-Appeal Brief Request for Review, by a panel of examiners, of the legal and factual basis of the rejections pending in the present case, in accordance with the Pre-Appeal Brief Conference Pilot Program<sup>1</sup>. Applicant believes that the issues are well-posed for appeal, and requests formal review, prior to appeal, on the following grounds.

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<sup>1</sup> Official Gazette of the United States Patent and Trademark Office, vol. 1296, Number 2, p. 67 (July 12, 2005).

## **I. Synopsis of Subject Matter Claimed**

Claim 12, the sole pending claim, which is reproduced in the attached Appendix, is directed to an invention of Dean Kamen, reknowned inventor, and founder in 1989 of an organization called “For Inspiration and Recognition of Science and Technology,” which has a web site at [www.usfirst.org](http://www.usfirst.org), and which works to inspire young people in science and technology<sup>2</sup>, including by sponsorship of a robotics competition involving a series of matches between alliances of teams. Claim 12 is applicable to scoring in such a competition.

Claim 12 is directed to a novel scoring system for a robotics competition in which the winning alliance’s raw score in a match is enhanced by a function of the raw score of the losing alliance. See claim 12, appearing in the Appendix, ¶5. The novel scoring system is used in “ranking the teams based on the final scores achieved in matches in which they participate” wherein “the contest is conducted in matches between two competing alliances of the teams, each match including a plurality of teams from each alliance” See claim 12, appearing in the Appendix, ¶7 and ¶3)(ii).

## **II. Summary of Status of the Case**

Claim 12 stands rejected in Examiner’s Office Actions of May 15, 2007 and November 29, 2007 under 35 U.S.C. § 103 for obviousness on the basis of Norman 6,674,259, in view of BOTBALL, and US published patent application 2002/0155884 A1 to Updike. The November

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<sup>2</sup> The organization’s programs currently reach 156,000 students worldwide. One of these programs, which is the subject of the present application, includes a robotics competition for high school students, and this competition now currently involves more than 1,500 teams of students, more than 37,000 in all, from 8 countries. The FIRST programs culminate in a championship competition so large that it fills the Georgia Dome in Atlanta Georgia. Dignitaries addressing the crowd in this competition on the importance of their involvement in science and technology in the FIRST program have repeatedly included Jon W. Dudas, Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office, and also his superior, Carlos M. Gutierrez, Secretary of Commerce.

29 Office Action fails to address a single argument made by Applicant in the response of October 12, 2007. Applicant therefore filed a notice of appeal on February 28, 2008. Applicant requested an interview to discuss the pending claim with the Examiner and the Supervisory Examiner following the filing of the notice of appeal, and that request was denied by telephone by both the Examiner and the Supervisory Examiner, each of whom stated that Applicant should use the Pre-Appeal Brief Conference Pilot Program. Accordingly this Request has been made promptly after denial of the request for an interview.

### **III. Issues for Review Prior to Appeal**

#### **1. The office actions fail to make a prima facie case for rejection because they fails to address all the claim limitations.**

It is the law that a claim cannot be rejected for obviousness unless all the claim limitations are addressed by the Patent and Trademark Office. “To establish prima facie obviousness of a claimed invention, **all** the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974).” MPEP § 2143.03 (emphasis added).

The office actions fail to identify prior art for key limitations of the pending claim. Assuming, for the sake of argument, that the Examiner’s references can be combined in the manner urged by the Examiner, and assuming further that the references stand for the propositions urged by the Examiner, nevertheless, the Examiner’s combination of references says nothing about using the novel scoring system in “ranking the teams based on the final scores achieved in matches in which they participate”, wherein “the contest is conducted in matches between two competing alliances of the teams, each match including a plurality of teams from each alliance”.

Let us look at the references cited. Norman et al. says nothing about scoring, and makes only oblique reference to points. Col 8, lines 53 and 56; col 19, line 37. The Examiner’s BOTBALL reference is in fact an amalgam of documents. In none of the BOTBALL documents

provided by the Examiner, however, can be found any support for the Examiner's statement that "In completing the tasks they are assigned points and at the end the team with the highest point value is declared the winner." Office actions (May 15 and November 29, 2007), p. 2, number 2. This is utter fiction. Even if it were so, however, there is nothing that discloses ranking teams based on final scores achieved in matches, with each match including an alliance of teams, as required by the claim.

The remaining reference offered by the Examiner in the combination of references, Updike, is about gambling, not robotic competitions, so it does not provide any further detail about using the novel scoring system in ranking robotics teams based on final scores achieved in matches, with each match including an alliance of teams, as required by the claim. In other words the office actions fail to establish a prima facie basis for rejection, and for that reason are improper.

**2. The office actions fail to make a prima facie case for rejection because the combination of references cited is impossible.**

The office action depends on the combination of the patent to Norman et al. and BOTBALL, on the hand, which deal with robotics competitions, with Updike, which deals with gambling. The robotics competitions are games of skill. Skill is required in designing and assembling and operating the robots. Under the Examiner's characterization of the robotics references, therefore, points are awarded for demonstration of skill in having the robots perform one or more tasks.

In contrast, gambling, the subject of the Updike reference, involves the making of a bet on the outcome of an event which is uncertain. The Examiner asserts that "it would have been obvious to one of ordinary skill in the art at the time the invention was made to have incorporated Updike's scoring system into Norma[n] et al's robot competition the motivation being to teach fair peer-to-peer competition." Office actions p. 3, number 2.

However, the Examiner is mischaracterizing the Updike reference. Updike concerns setting odds for betting purposes, not scoring in competitions involving the exercise of skill.

“Apparatus and methods for fair peer-to-peer gambling is disclosed.” Abstract, first sentence. The approach of Updike is applicable to gambling, and uniquely applicable to gambling. Abstract, Updike, patent publication US 2002/0155884. Indeed, the process flow of Fig. 5 of this reference tracks the description in the abstract. While this approach may make sense in gambling, how would one follow this approach in a robotics competitions? None of the conditions called for by the reference apply to a robotics competition because there is no betting in a robotics competition. There is no bet statement, there is no risk percentage, there is no bet. Robotics competitions involve skill, not betting, and the Updike reference cannot possibly be applied to robotics competitions.

Accordingly, because the combination of references offered by the Examiner is impossible, there is no prima facie case for rejection and the rejection is improper.

**3. The office actions fail to make a prima facie case for rejection because the Updike reference does not stand for the proposition urged in the office actions and, because it is a zero sum competition, teaches away from the subject matter claimed.**

The Examiner, in citing the Updike reference, believes that it is somehow pertinent to the scoring system claimed herein because the reference discloses that “The winning points are preferably subtracted from the loser’s account and added to the winner’s account without a “house cut.” Abstract. Let us assume, for the moment, as the Examiner would have us believe, that the “points” are the same here as points in a game of skill, such as a robotics competition. If so, then the Examiner has proven too much, because in Updike —unlike the presently claimed invention—what the winner gains, the other loser loses. As mentioned in a previous response, rules specifying that what one gains, the other loses—such rules define a zero-sum game. Gambling, which is the subject of the Updike reference, is a zero-sum activity. What one person wins the others must lose. Updike was concerned with setting the odds in a fair manner for such a zero-sum game.

In contrast the subject matter claimed herein defines a scoring system that is completely different from Updike’s system, because it is not a zero-sum game. In any match what is added

to the score of the teams of the winning alliance is emphatically *not* subtracted from the score of the teams of the losing alliance. In fact, the reverse is true: what is added to the score of the winning alliance is a function of the score of the teams of the losing alliance and *nothing* is subtracted from the scores of the teams of the losing alliance. See ¶5 and ¶6 of the claim as shown in the attached Appendix. Thus Updike does not meet the terms of the scoring system claimed.

For this additional reason, the office actions fail to make a prima facie case for rejection.

### **Conclusion**

For the foregoing reasons, the record of prosecution of the present application has been, and remains, utterly devoid of any basis for rejection of the pending claim. The rejection under 35 U.S.C. § 103 is improper and must be withdrawn. Accordingly, claim 12 is in condition for allowance. Reconsideration of the application and issuance of a notice of allowance are respectively requested.

Respectfully submitted,

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## Appendix A

### Pending Claim 12 with Numbered Paragraphs in the Body

12. A method for fostering coopertition and gracious professionalism among students while inspiring an appreciation of science and technology, the method comprising:

¶1) establishing a contest played on a playing field with at least four robots, such robots designed and built with participation of such students, such contest requiring accomplishment repetitively of a designated physical task on the playing field, wherein:

¶2) (i) each robot is controlled by a distinct team of students and designed to repetitively accomplish the physical task, performance of which on the playing field by a given robot triggering attribution to a score based on frequency of achievement of the physical task by the given robot; and

¶3)(ii) the contest is conducted in matches between two competing alliances of the teams, each match including a plurality of teams from each alliance;

¶4) assigning a raw score after each match to each alliance based on frequency of achievement of the task by robots of each team in each such alliance;

¶5) determining a final score for a winning alliance in each match, such winning alliance having a raw score exceeding the raw score of the other alliance by enhancing the raw score of the winning alliance by a function of the raw score of the other alliance, so that the winning alliance is thus motivated to cause the other alliance to achieve a high raw score, and the teams of each alliance must work cooperatively;

¶6) setting a final score for the other alliance in each match equal to the raw score achieved by that alliance; and

¶7) ranking the teams based on the final scores achieved in matches in which they participate;

¶8) so that the students, by engaging in the contest, are provided with an experience involving science and technology under processes as recited herein that motivate cooperation in the midst of competition for a highest final score on the playing field.